

TSHEGLOKOVA.

Metallized Paper. A. S. Korshojev, G. A. Korenkova, and -----Tsheglo-  
kova (Bumashnaia Promish. (Paper Ind.)), 1938, 16, (6), 28-30).--/ In  
Russian./ The types of paper suitable for metallizing are reviewed; a  
special adhesive is recommended.--D.R.S.

EXCERPTA MEDICA Sec 6 Vol 13/3 Internal Med. Mar 59

1394. SOME RARE CLINICAL FORMS OF BENIGN LEPTOSPIROSIS (FEBRIS  
AQUATILIS) OBSERVED IN THE LOWER PART OF THE KAMTSHIA  
RIVER (Bulgarian text) - Tshemishansky G. Distr. Hosp., Varna -  
SOVR. MED. 1958, 9/1 Graphs 2

Two cases with haemorrhagic diathesis, and 2 cases with jaundice and one case  
with a morbilliform eruption are described. The serological examinations in the  
cases showed positive results for agglutination with the local strains of 'Tsala-  
pitsa' and 'Benkovsky'. (L, 4, 6, 17)

TSHERNY A.T.

5098. TSHERNY A. T. et al. Determination of sulphur in plant and animal products  
Biochim., Moscow 1950, 15/2 (134-136) Tables 1

The principle consists in the conversion of sulphur to  $H_2S$  by heating the sample with oxalic acid in a stream of  $CO_2$  and iodometric titration of the  $H_2S$  formed. The combustion temperature is  $750-800^\circ$  and the apparatus is similar to an ordinary combustion apparatus for elementary analyses. The duration of one determination is only 15 min.

Procházka - Prague

SO: Excerpta Medica, Section II, Vol. 4, No. 10

EXCERPTA MEDICA Sec 9 Vol 13/2 Surgery Feb 59

1325. THE POSSIBILITIES OF LIQUIDS PENETRATING INTO THE RETRO-VESICAL SPACE AFTER INJURIES OF THE URETHRA AND ON THE CAPSULE OF THE PROSTATIC GLAND (Bulgarian text) - Tshervena-kov A. - KHIRURGIYA (Sofia) 1957, 10/9 (769-776) illus. 2

This article is based on data collected from a fatal case in which the urethra was injured and a large amount of oxycyanide penetrated into the tissues during cystoscopy. An experiment was made on a cadaver in order to study the injuries which may be caused by unsuitable manipulation during cystoscopy. It is comparatively easy to perforate the urethra in its bulbar part; a complete, circular lesion could not be achieved. The cystoscope, which has already penetrated outside the urethra and behind the prostatic gland may glide upwards without injuring the rectum, while introducing the solution from an irrigator, as for filling of the bladder. The irrigator being usually placed about 80 cm. above the level of the bladder, the liquid enters under pressure and the tissues are separated, and something like a cavity is formed in between the tissues; a space which may even be viewed with the cystoscope and which is surrounded by a tissue bearing some semblance to vesical mucosa. Being thus introduced, the solution quickly spreads along the retroperitoneal space and this may be soaked in a short time. If the solution contains some toxic antiseptic a superacute intoxication may ensue. Such an intoxication, caused by the penetration of a solution of mercuric oxycyanide, may be observed in connection with operations performed every day. It is not difficult, while peeling a prostatic adenoma, to penetrate through the postero-superior part of the prostatic capsule, and from there the solution may infiltrate the retrovesical. Two illustrative cases are reported.

TSNESNEVSKAYA, R.M.

Macrosynoptic characteristics and forecast of the October  
precipitation in Central Asia. Trudy Sred.-Az.nauch.-issl.  
gidrometeor.inst. no.9:67-82 '63. (MIRA 17:4)

ACCESSION NR: AT4016523

S/2648/63/000/009/0067/0082

AUTHOR: Tshesnevskaya, R. M.

TITLE: Macrosynoptic characteristics and prediction of October precipitation in Central Asia

SOURCE: Tashkent. Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorologicheskii institut. Trudy\*, no. 9(24), 1963. Voprosy\* dolgosrochny\*kh prognozov pogody\* (Problems of long term weather prediction), 67-82

TOPIC TAGS: meteorology, weather forecasting, precipitation, long range weather forecasting, climatology, climate, cyclone, anticyclone, atmospheric pressure

ABSTRACT: A study was made to determine the factors responsible for the falling of different quantities of precipitation in Central Asia in the autumn and to find a prognostic approach making it possible to determine whether the coming season will be dry or moist. Synoptic conditions determining dry and moist autumn seasons were studied in detail. Aerosynoptic data for 1939-1957 and climatic data for 1891-1957 were used. Of the 67 Octobers between 1891 and 1957 there were 14 cases with precipitation considerably below the mean and 6 cases with precipitation considerably above the mean. All Octobers were classified as five types. Aerosynoptic data (pressure, temperature and precipitation)

Card 1/183

ACCESSION NR: AT4016523

were studied for the three months preceding October. Circulation factors are largely responsible for variations in October precipitation, as shown in Figure 1-5 in Enclosure. Anomalously moist and moist Octobers in Central Asia are caused by a well-expressed predominance of meridional circulation during the month, creating favorable conditions for intrusions from the northwest and west. Anomalously dry and dry Octobers are caused by a predominance of latitudinal processes; polar influences are weak or poorly expressed and the planetary high-level frontal zone is oriented latitudinally and is not displaced farther south than 45° N. Octobers with precipitation near the mean are caused by the presence of latitudinal and meridional processes and the absence of wave activity in Central Asia. The characteristics of cyclonic and anticyclonic activity in the preceding July indicating an excess of October precipitation are: a) a predominance of latitudinal circulation with a well-expressed zonal distribution of pressure fields and no intrusions of Arctic anticyclones into the temperate latitudes; b) high cyclonic activity in southern Eurasia with emergence of several well-developed cyclones. Indicators of an October precipitation deficit are the following patterns of cyclonic and anticyclonic activity in the preceding July: a) intensified circulation with a rapid change of pressure fields and the intrusion of Arctic anticyclones into temperate latitudes; b) weakened cyclonic activity without emergence of well-developed southerly cyclones. An indicator of near-mean October precipitation is the presence in the preceding July of well-developed latitudinal

Card

2/14/3

ACCESSION NR: AT4016523

circulation and anticyclonic activity with intrusion of Arctic anticyclones into the temperate latitudes. Forecasts can be made more accurate by taking into account synoptic processes occurring in August and September. Orig. art. has: 5 figures and 5 tables.

ASSOCIATION: Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorologicheskii institut (Central Asian Hydrometeorological Scientific Research Institute)

SUBMITTED: 00

DATE ACQ: 20Feb64

ENCL: 10

SUB CODE: AS

NO REF SOV: 001

OTHER: 000

Card 3/18 3



TSHESNEVSKAYA, R.M.

Horizontal moisture transfer over Central Asia. Trudy Sred.-Az.  
nauch.-issl. gidrometeor. inst. no.20:128-135 '65.

(MIRA 18:10)

TSNESNEVSKAYA, R.M.

Forecasting extremely wet and extremely dry Octobers in Central  
Asia. Trudy Inst. mat. AN Uz. SSR no.25:97-115 '62. (MIRA 16:8)  
(Soviet Central Asia--Rain and rainfall)

TSHESNEVSKAYA, R.M.

Comparison of characteristics of extremely wet and extremely dry  
Octobers in Central Asia with features of atmospheric circulation  
over a long period of years. Trudy Inst. mat. AN Uz. SSR no.25:  
117-132 '62. (MIRA 16:8)

(Soviet Central Asia--Meteorology)

59

**A New Variant of the Capillary Method for Measuring Small Changes in Surface Tension and Its Application** (original text in Russian), S. S. Urasovsky and P. M. Tshetayev; *Colloidal Journal (USSR)* Sep-Oct '49 (11-5 U.S. transl. pp 359-362; 1 illus., 1 tab.

The article describes the development of a new compensating variant of the capillary method for the determination of small changes in surface tension. The principle of surface tension is confined to measurements of compensating deviations required for the retention of the meniscus of fluid in one point of the capillary, which is fixed strictly in the field of vision of a microscope. The introduced variant offers very high accuracy and is particularly recommended for accurate measurements of the surface tension in small thermal intervals, and also for kinetic measurements in solutions and in particular for the determination of the periods of structural transformation in liquids.

(33)

15-2-214

ALSO SEE METALLURGICAL LITERATURE CLASSIFICATION

KHRISTIN, L.~~A~~, prof.; TSHETSETSKAYA, Ye.K.; DIMITRASHKO, V.I.

Epidermophytosis in combination with other lesions of the skin.  
Vest.derm.i ven. 35 no.5:63-64 '62. (MIRA 15:5)

1. Iz kliniki kozhno-venericheskikh bolezney Stanislavskogo medi-  
tsinskogo instituta.  
(DERMATOMYCOSIS) (SKIN---DISEASES)

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																										COMMON ELEMENTS																									
<p><i>Press and Tube Departments for Treating Light Alloys. A. V. Tshitsayev (Legkie Metally (Light Metals), 1933, (5), 18-23).—[In Russian.] Basic faults and merits of the equipment of a factory as revealed by the first few months' operations are discussed.—D. N. S.</i></p>																																																			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																										COMMON VARIANTS INDEX																									
1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									

TSHOBANOW, W.

"Linear limitation proceedings" In German

p. 141 (Studia Mathematica, Papers issued by the Polish Academy of Sciences,  
Vol. 17, no. 2, 1958, Warsaw, Poland)

Monthly Index of East European Accessions (EEAI) LC, Vol. 8 No. 1, Jan. 59.

PROCESSING AND PROPERTIES INDEX																									
1ST AND 2ND PROPERTIES													3RD AND 4TH PROPERTIES												
<p><i>CA 20</i></p> <p><b>On the basis of Theory of Strength and Plasticity (original text in Russian), E. M. Barbinin and I. A. Tshubakov, Bul. Academy Sc. (USSR) Oct '49 (10 Mthly); pp 1433-1435; 11 illus, 14 eq.</b></p> <p>An introduction should be made into the basis of the modern theory of strength and plasticity about the double nature of the highest stresses (normal <math>\sigma</math> and tangential <math>\tau</math> max, affecting each point of the body in deformation) and about the double character of the material resistance (resistance to breaking under the effect of normal stresses and resistance to shearing under the effect of tangential stresses). The tensile strength of materials is characterized by their ability to resist such shearing stresses which take place in the stages of plastic deformation of a breaking specimen. Investigations show that this strength appears to be constant and does not depend upon the stressed condition. The above described conditions of strength and plasticity and their unique nature and a newly introduced strength criteria enables the determination</p> <p>of (1) the uncommon characteristics of the all-round nonuniform compression, (2) the establishment of new criteria for brittleness and plasticity, (3) the development of a theory determining the load capacity of metals and their capacity to withstand the effect of stress concentrations, (4) the reason for considerable increase in tensile strength of the species of plastic metals, and (5) the explanation of certain problems of tensile strength encountered during alternate loads (fatigue), etc.</p>																									
<p>456-514 METALLURGICAL LITERATURE CLASSIFICATION</p> <p>831117 Dec 04 1951</p>																									



PROCESSES AND PROPERTIES INDEX																									
FIRST AND SECOND ORDERS													THIRD AND FOURTH ORDERS												
<p>CA</p> <p>Inner recombination in the photodissociation of polyatomic molecules. A. N. Terenin and R. Tshubarov. <i>Acta Physicochim. U. R. S. S. R.</i> 1 26(1967) (in English).</p> <p><math>\text{SnI}_2</math> on exposure to light of <math>\lambda</math> 2450-2150 Å. decumps. into <math>\text{SnI} + \text{I}_2</math> and is accompanied by a fluorescence due to <math>\text{I}_2</math>. A study of the factors affecting the fluorescence leads the authors to conclude that the photodissociation is simultaneously accompanied by a union of the I atoms before they leave the rest of the mol. The product, excited <math>\text{I}_2</math>, then fluoresces. An addnl. thermal energy of activation is necessary for the process. The quenching of the fluorescence by A and H is also studied. E. G. Wuig</p>																									
<p>ASACSLA METALLURGICAL LITERATURE CLASSIFICATION</p>																									
<p>GROUPS</p>																									

Tshuiko, V T

V12213\* (Russian.) A Method for Concentrating Copper  
Traces by the Use of Organic Reagents. Sposob konsten-  
trirovaniia sledov medi s primeneniem organicheskikh re-  
aktivov. V. T. Tshuiko and A. U. Mamoko. Zhurnal An-  
aliticheskoi Khimii, v. II, no. 3, May 1956, p. 332-336.  
— Rapid determination methods for Cu admixtures in Pb, Cd,  
Ni, and Co salts have been worked out.

2/ 4  
C  
C  
C  
PM  
20

TSHUK, A.A., Cand Agr Sci — (diss) <sup>Course</sup> "Rate of growth, formation, and  
variety structure of pine planting." // Kiev, 1959, 16 pp (Min of  
Agr UkrSSR. Ukrainian Acad Agr Sci) 150 copies (KL, 35-59, 115)

- 50 -

CA

The physiology of sperm motility and the influence of vitamins and hormones thereon. Ren4 Tahumi, *Gynkol. et obstet.* 46, 149 (1947); *Chem. Zentr.* (Russian Zone Ed.) 1949, 1, 617.—Diln. of the semen with isotonic solns. (glucose 3, Na<sub>2</sub>HPO<sub>4</sub> 0.6, NaCl 0.2, and K<sub>2</sub>HPO<sub>4</sub> 0.01 g. in 100 cc. water) increased both the duration and intensity of motility. In this soln. motility could be detected as long as 700 hrs. Ringer soln. was without effect on the sperm motility. The optimum temp. was 18°. Daylight reduced motility; thyroxine, nicotinamide, and vitamin E increased it; ascorbic acid, acetylcholine, and pituglandol had no effect. Lactofavin and especially adermine had a strong inhibiting effect. M. G. Moore

ZHEDEK, Mark Samoylovich; KLYUSHNIK, Nikolay Pavlovich [Kliushnyk, M.P.];  
TSIBA, L.O., red.; STARODUB, T.A., tekhn.red.

[Laboratory practice for the course in organic chemistry] Laboratorni roboty z kursu organichnoi khimii. Kyiv, Derzh. vyd-vo tekhn.lit-ry URSR, 1961. 233 p. (MIRA 15:5)  
(Chemistry, Organic--Laboratory manuals)

TSIP. SE, p. 3. --

"Data on the Collateral Blood Circulation of the Kidney."  
Tr Med Sci, Tbilisi State Medical Inst, Tbilisi, 1952. (SovMed,  
No 2, Sep 54)

Survey of Scientific and Technical Dissertations Defended at  
USSR Higher Educational Institutions (19)

SO: Sum. No 481, 5 May 55

MAYSURADZE, Z.N.; GABUNIYA, D.S.; LEGRAN, N.E.; MAKADZE, M.M.;  
MAKHATADZE, N.K.; SARKISOVA, Ye.G.;  
TSIBADZE, D.S.

Microvascular system of the cerebral cortex in dogs. Soob.  
AN Gruz. SSR 26 no.4:469-476 Ap '61. (MIRA 14:8)

1. Tbilisskiy gosudarstvennyy meditsinskiy institut.  
Predstavleno akademikom A.D. Zurabashvili.  
(CEREBRAL CORTEX--BLOOD VESSELS)

MIRIANASHVILI, G., arkhitektor; TSIBADZE, O., kand. arkhitektury

Exterior walls of apartment houses and architectural details to be  
used as a protection from the sun. Zhil. stroi. no.10:16-19 '60.  
(MIRA 13:9)

(Walls)

(Georgia--Architecture and climate)



GAGOSHIDZE, Valerian Sergeyevich; NEPRINTSEV, M.N., retsenzent;  
TSIBADZE, O.V., retsenzent; AGABABYAN, R.Ya., red.

[Designing economical apartments and units for conditions  
existing in the south] Proektirovanie ekonomichnykh kvartir  
i seksii v usloviakh iuga. Tbilisi, Gos.izd-vo uchebno-  
pedagog. lit-ry "TSodna," 1961. 114 p. (MIRA 18:4)

TSIBAKOV, B. S., SIFOROV, V. I., PROSIN, A. V.

"Investigation of the Properties of Radio Communications Channels  
Containing Statistically Inhomogenous Media."

Report presented at the 13th General Assembly of URSI - Commission VI, 5-15 Sep 1960,  
London UK.

TSIBAKOV, B. S., SIFOROV, V. I. PROSIN, A. V.

"Investigation of the Properties of Radio Communications Channels  
Containing Statistically Inhomogenous Media."

Report presented at the 13th General Assembly of URSI - Commission VI,  
5-15 Sep 1960, London UK

ALADASHVILI, Z.M., inzh.; LEZHAVA, G.G., inzh.; MATIKASHVILI, I.V., kand. tekhn.  
nauk; TSIBALASHVILI, G.G., inzh.

The TR-4 device for measuring fuel consumption in motor vehicles. Priboro-  
stroenie no.7:26 J1 '65. (MIRA 18:7)

SKOKAN, I., inzhener; TSIBANOV, V. inzhener.

How to use the radiator for air cooling in industrial plants.

Mias. ind. SSSR 27 no.4:52-53 '56.

(MLRA 9:10)

(Packing houses--Air conditioning)

KHRISTODULO, D., doktor tekhnicheskikh nauk; TSIBANOV, V., kandidat  
tekhnicheskikh nauk.

Automatic prevention of damage to compressors. Mias.ind.SSSR 27 no.2:  
27-31 '56. (MLRA 9:8)  
(Compressors--Safety appliances)

KHRISTODULO, D., doktor tekhnicheskikh nauk.; TSIBANOV, V., kandidat  
tekhnicheskikh nauk.

Automatic prevention of the overfilling of liquid separators.  
Mias. ind. SSSR 27 no.5:29-30 '56. (MLRA 9:11)  
(Refrigeration and refrigerating machinery)  
(Separators (Machines))

KOMAROV, N.S., prof.; TSIBANOV, V.S., kand. tekhn. nauk, retsenzent;  
DOROGOV, N.P., inzh., red.; TAIROVA, A.L., red. izd-va;  
MODEL', B.I., tekhn. red.

[Manual for the refrigerating engineer] Spravochnik kholodil'-  
shchika. 2 izd., perer. i dop. Moskva, Mashgiz, 1962. 418 p.  
(MIRA 15:12)

(Refrigeration and refrigerating machinery)



TSIBANOV, Valentin Semenovich, kand.tekhn.nauk; VASIL'YEVA, G.N., red.;  
CHIBYSHEVA, Ye.A., tekhn.red.

[Automatic safety appliances for two-stage ammonium compressors]  
Avtomaticheskaya protivopavariinaya zashchita dvukhstupenchatyykh  
ammiachnykh kompressorov. Moskva, Pishchepromizdat, 1957. 25 p.  
(MIRA 12:10)

(Compressors--Safety appliances)

37241

S/148/62/000/003/006/011

E193/E383

18.11.71

AUTHORS: Okhrimenko, Ya.M., Tsibanova, M.S. and Shibalov, N.S.

TITLE: Work-hardening and recrystallization of the alloy  
EI617 (EI617)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya  
metallurgiya, 1962, no. 3, 95 - 102

TEXT: The results of studies of workability of heat-resistant alloys conducted at the Moscow Steel Institute indicate that optimum results in hot forging can be attained either by isothermal forging at a temperature ensuring the highest possible plasticity and best combination of mechanical properties of the forged part, or by forging in the widest possible temperature range and then heat-treating the forged component. Difficulties have been encountered in applying the latter method to the EI 617 alloy in that a large proportion of scrap has been produced under industrial conditions due to cracking, apart from the fact that the productive efficiency of this method has been low owing to a narrow permissible forging-temperature range (1 000 - 1 160 °C) - hence the  
Card 1/6

X

Work-hardening and ....

S/148/62/000/003/006/011  
E193/E383

present investigation whose object was to study the recrystallization of the alloy EI 617 so as to determine the limits of the temperature range within which the effect of plastic deformation would be nullified by recrystallization. In the first series of experiments various reductions were given to wrought test pieces (10 mm diameter, 15 mm high) by free upsetting on a laboratory drop hammer at temperatures ranging from 850 - 1 250 °C, and the degree of recrystallization taking place during hot deformation was determined by metallographic examination; in addition, the reduction at which the first cracks appeared in the test pieces was determined for each test temperature. The results are reproduced in Fig. 1, where the maximum permissible reduction ( $\epsilon$ , %) is plotted against the forging temperature (°C). The second series of experiments differed from the first in that cast test pieces, or specimens obtained by forging cast material, were used. The results are reproduced in Fig. 2, where the maximum permissible reduction in free upsetting ( $\epsilon$ , %) is plotted against the forging temperature (°C), the various curves

Card 2/6

Work-hardening and ....

S/148/62/000/003/006/011  
E193/E383

relating, respectively, to: 1 - cast material, upset on a drop hammer; 2 - forged material upset on a drop hammer; 3 - forged material upset on a forging press. In the third and final series of experiments, the onset and the rate of progress of weakening of the alloy were studied by a new method based on the assumption that in the case of a specimen deformed plastically at a high temperature under a given stress, the load will decrease if weakening of the test-piece material takes place, the load-versus-time curve providing means of assessing the rate and intensity of the process. A beam-type tensile-test machine was used in applying this method to avoid the risk of the load decreasing due to spurious effects. The tests were carried out both in tension and compression at temperatures ranging from 850 - 1200 °C, an electrical-resistance furnace mounted on the tensile testing machine being used to heat the test piece and maintain its temperature throughout each test. After heating the test piece and stabilizing the temperature the load was applied and when a certain degree of plastic deformation had taken place, the testing machine was stopped and from that

Card 3/6

Work-hardening and ....

S/148/62/000/003/006/011  
E193/E383

moment the variation of load in time was recorded [Abstracter's note - although not explicitly stated, the relationship studied was, in fact, the load-versus-time relationship at a constant strain]. Some of the typical results obtained for specimens tested in tension are reproduced in Fig. 6a and 6b in the form of load (P, kg)-versus-time (min) curves, graphs a and b relating to test temperatures of 850 and 950 °C, respectively. (the broken curves represent results obtained on specimens tested under initial load producing no plastic deformation). A load of 1 000 kg (equivalent to a stress of 35 kg/mm<sup>2</sup>) applied to a test piece at 850 °C produced a strain  $\Delta l = 0.7$  mm ( $\epsilon \approx 2\%$ ); the test piece broke after 15 min, although the UTS of the EI 617 alloy at 850 °C had been found to be approximately 48 kg/mm<sup>2</sup>. A load of 800 - 1 000 kg, applied at 900 °C, produced very slight plastic deformation and did not decrease in time. At 950 °C, however, a load of 1 000 kg produced elongation of 2 - 3% and decreased after 4 min to 550 kg. Above 950 °C the rate at which the load decreased with holding time increased rapidly with rising temperature. Thus, for instance, a load

Card 4/6

Work-hardening and ....

S/148/62/000/003/006/011  
E193/E385

producing  $\epsilon = 11\%$  at  $1\ 200\ ^\circ\text{C}$  decreased by 60% in 20 sec. Compression tests yielded similar results. The data provided by mechanical tests and correlated with results of metallographic examination indicated that the lowest temperature at which the effects of hot plastic deformation are nullified by recrystallization taking place during the deformation process is  $1\ 000\ ^\circ\text{C}$  for wrought and  $1\ 050\ ^\circ\text{C}$  for cast EI617. This temperature sets the lower limit of the temperature range within which the alloy studied can be successfully hot-worked. The upper limit of  $1\ 220\ ^\circ\text{C}$  is set by the fact that at higher temperatures workability of the alloy falls rapidly due to excessive grain growth. There are 7 figures.

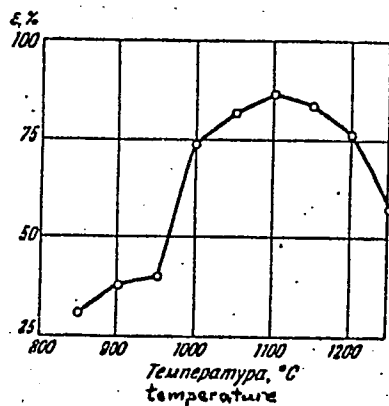
ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

SUBMITTED: October 30, 1961

Card 5/6

Work-hardening and ....

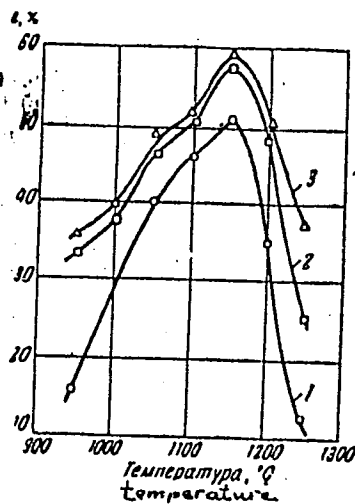
Fig. 1:



Card 6/6

S/148/62/000/003/006/011  
E193/E383

Fig. 2:



**"APPROVED FOR RELEASE: 03/14/2001**

**CIA-RDP86-00513R001757020013-5**

1. The first part of the document is a list of the

names of the persons who were present at the

meeting.

**APPROVED FOR RELEASE: 03/14/2001**

**CIA-RDP86-00513R001757020013-5"**

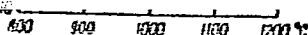


**"APPROVED FOR RELEASE: 03/14/2001**

**CIA-RDP86-00513R001757020013-5**

**APPROVED FOR RELEASE: 03/14/2001**

**CIA-RDP86-00513R001757020013-5"**



400 900 1000 1100 1200 °C

Fig. 1. Plasticity during settling of casts of various

ZALESSEY, V. I.; TSIBANOVA, M. S.; KOZLOV, Yu. I.

Determining plasticity during the forging of ingots and blanks.  
Izv. vys.ucheb.zav.; chern.met.7 no. 5:90-93 '64. (MIRA 17:5)

1. Moskovskiy institut stali i splavov.

ACC NR: AP6028390

SOURCE CODE: UR/0182/66/000/006/0015/0019

AUTHOR: Zalesskiy, V. I.; Kozlov, Yu. I.; Tsihanova, M. S.

27

ORG: none

TITLE: Experimental simulation of the closing of defects during hot upsetting and drawing of low-plasticity steel

SOURCE: Kuznechno-shtampovochnoye proizvodstvo, no. 6, 1966, 15-19

TOPIC TAGS: hot upsetting, metal drawing, metallurgic research, metallurgic process

ABSTRACT: These experiments were performed with specimens of low-plasticity steel having a high content of Cr (~22%), whose ingots display such characteristic defects as various transverse and longitudinal casting and shrinkage cracks. The problem was to determine the forging conditions in which these internal ingot defects could be more or less closed up. To this end, the pattern of distribution of deformations during upsetting was simulated by using composite models -- specimens of the investigated steel (Fig. 1) represented by a pressed-in set of solid washers alternating with perforated washers (single axial perforation). The artificial "defects," (holes in the washers) like defects of shrinkage origin, were disposed along the axis of the

Card 1/4

UDC: 621.73.042

L 08945-67

ACC NR: AP6028390

blank. These composite models with "defects" were then upset in a 200-ton hydraulic press at 1000 and 1150°C, with degree of deformation  $\epsilon$  amounting to 30 and 50 as well as 50 and 70%,

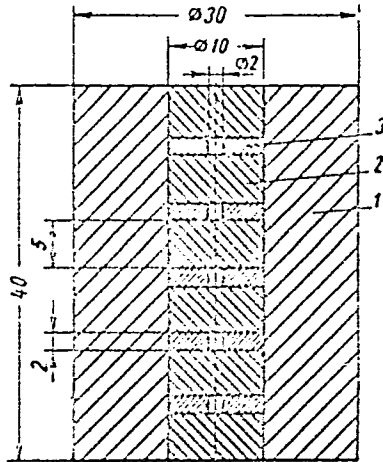


Fig. 1. Specimen with artificial defects:

1 - die; 2 - solid washer; 3 - washer with "defect"

respectively, on using various shapes of upsetting punches. It was thus found that upsetting to  $\epsilon = 50$  and 70%, at 1150°C, with punches of various shapes, produces the best results in closing the "defects" (i. e. reducing to zero the height of the "defects") and that preliminary upsetting with a concave spherical punch is

Card 2/4

1. 00745-57

ACC NR: AP6028390

highly adverse, since it causes the metal to initially flow into the spherical cavity of the punch, thus increasing the height of the defects. This was followed by studies of the effect of drawing on the closing of defects, performed on specimens measuring 40x250 mm in diameter, in which artificial "defects" were produced by drilling apertures of 2 mm in diameter in the axial, transverse-horizontal and transverse-vertical directions (Fig. 2), simulating internal discontinuities in the metal. The drawing was performed in a 200-ton hydraulic press,

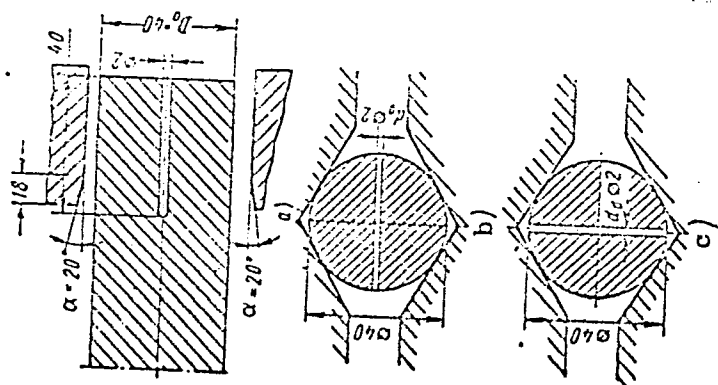


Fig. 2. Location of axial and diametral channels ("defects") during deformation:  
a - axial; b - diametral horizontal;  
c - diametral vertical

Card 3/4

L 08945-67

ACC NR: AP6028390

with  $\epsilon = 10, 15, 20$  and  $30\%$ . It is thus found that axial defects most fully closed when  $\epsilon = 30$  for a single reduction in area and transverse defects, when  $\epsilon = 20\%$ . The transverse defects running in the direction of action of the deforming force failed to close completely and instead merely curved in the direction of flow of the metal. Orig. art. has: 7 figures, 1 table.

SUB CODE: 13, 11/ SUBM DATE: none/ ORIG REF: 003

Cont.

4/4 not

8/0148/64/000/005/0090/0093

ACCESSION NR: AP4039273

AUTHOR: Zaleskiy, V. I.; Tsibanova, M. S.; Kozlov, Yu. I.

TITLE: Determination of Plasticity in Ingot and Billet Forging

SOURCE: IVUZ. Chernaya metallurgiya, no. 5, 1964, 90-93

TOPIC TAGS: plasticity, deformation, hot drawing, reduction, forging ingot, billet

ABSTRACT: The authors investigated plasticity for the purpose of determining the proper degree of deformation during hot drawing. Reduction was carried out in rhombic dies. Cast and forged 250 mm long specimens with a 40 mm diameter were cut from a low-plasticity steel ingot. Heating to 1150 C was followed by cooling to 30 C above test temperatures and 15 min holding. A 200 ton hydraulic press was applied. Rupture and upsetting tests showed the optimal temperature range for the deformation of the specimens to be 950 to 1170 C. Under industrial conditions the degree of deformation was calculated from the press stroke according to the equation

$$\epsilon = D_0 - h_1/D_0 \times 100\%$$

Card 1/2



ACCESSION NR: AP4039273

where  $D_0$  = initial diameter of the specimen;  $h_1$  = final permitted height in drawing during one operation. The cross-sectional area was measured with a planimeter from a templet indentation. Thus, a method simulating the process of a given forging operation is suitable for the determination of the degree of deformation. Orig. art. has: 2 figures, 2 equations and 2 tables.

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys)

SUBMITTED: 08Oct63

DATE ACQ: 12Jun64

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

Card 2/2

L 20777-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(l) JD/HW  
ACC NR: AP6004680 SOURCE CODE: UR/0182/65/000/010/0009/0010

AUTHOR: Zalesskiy, V. I.; Kozlov, Yu. I.; Tsibanova, M. S.

ORG: none

TITLE: Effect of the shape of tool on the pattern of deformation of low-plasticity steel during upsetting <sup>40</sup><sub>39</sub>  
B

SOURCE: Kuznechno-shtampovochnoye proizvodstvo, no. 10, 1965, 9-10

TOPIC TAGS: hot upsetting, material deformation, plasticity, die shape, punch shape

ABSTRACT: Considering that many low-plasticity alloys are forged by upsetting and that initially concave and convex spherical upset dies and punches are used for this operation while flat upset dies and punches are used for final upsetting, the effect of the configuration of upset tools on plasticity as well as on the nonuniformity of deformation over height of specimen was investigated under laboratory conditions (specimens with initial diameter  $D_0 = 30$  mm and initial height  $H_0 = 40$  mm, of cast low-plasticity metal. The upsetting was performed at 800-1200°C with deformation  $\epsilon_{total} = 40\%$  over the height of the specimen. It was found (Fig. 1) that over the range of upsetting temperatures from 950 to 1170°C the greatest plasticity is displayed by specimens subjected to preliminary upsetting (10% deformation over height)

Card 1/3

UDC: 621.733.4

L 20777-66

ACC NR: AP6004680

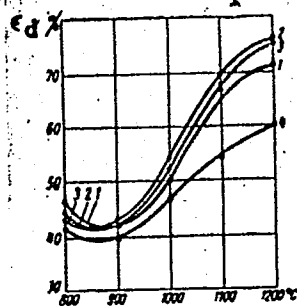


Fig. 1. Plasticity of steel upset by means of upset punches and dies of various configuration:

1 - flat; 2 - convex with  $\alpha = 30^\circ$ ; 3 - convex with  $\alpha = 20^\circ$ ; spherically concave

Card 2/3

L 20777-66

ACC NR: AP6004680

by means of a punch with a projecting part 4.3 mm high shaped like a truncated cone. Over the entire range of upsetting temperatures employed the lowest plasticity was displayed by specimens upset by means of spherically concave tools (especially at 1100-1200°C, when the deformation is ~15-17%); The plasticity of specimens upset by means of flat punches is of an intermediate value. Upset punches with a projection shaped like a truncated cone reduce the nonuniformity of deformation, since then, during the preliminary upsetting, the projecting tip of the punch penetrates the central area of the specimen in such a way as to cause flowage of the specimen's metal; subsequent upsetting with flat upset punch causes flowage of metal in the surrounding annular zone of the specimen with its small surface area of friction; this displaces the metal of that zone both in the outward direction and in the direction of the cavity previously formed by the tip of the cone-shaped upset punch. All this leads to a sharp decrease in the zone of difficult deformation. By contrast, preliminary upsetting by means of spherically concave upset tool, with a deformation of ~15% over height, is highly disadvantageous, since it causes a decline in plastic properties and an increase in the nonuniformity of deformation. Orig. art. has: 5 figures, 1 formula, 1 table.

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 000/ OTH REF: 000

Card 3/3 vmb

ACCESSION NR: AP4019026

S/0182/64/000/002/0035/0038

AUTHOR: Zaleskiy, V.I.; Tsibanova, M.S.; Kozlov, Yu. I.

TITLE: Technique for heating heat-resistant steel ingots

SOURCE: Kuznechno-shtampovochnoye proizvodstvo, no. 2, 1964, 35-38

TOPIC TAGS: steel production, ingot heating, steel, heat resistant steel, austenitic steel, carbide steel, heat resistance

ABSTRACT: Ingots of grade 48AN-1 heat-resistant steels of the austenite-carbide group were investigated. Thermocouples were used to measure the temperature. The results showed that steel ingots had previously been heated for too long a time and that the duration may be reduced by 6 hours. The temperature gradients in the steel were also measured. The author recommends rapid heating of the steel by placing the cold ingots into an oven already heated to 600 C. The temperature is then immediately raised to 800 C (for 1 to 1.5 hours) and the ingots are held at this temperature for 5 hours. The temperature is then forced to 1170-1200 C over 5 hours and maintained at this level for 3 to 4.5 hours. The total duration of heating for an ingot weighing 3.7 metric tons was about 16 hours. This forced method produced results which were in no way inferior to those of the usual heating method. "K. Ye. Sharapov, A. I. Senyakin, K. V. Ignat'yev and Ye. A.

-Card 1/2

ACCESSION NR: AP4019026

Petrova also took part in this work." Orig. art. has: 8 figures.

ASSOCIATION: TsZL zavod

SUBMITTED: 00

DATE ACQ: 27Mar64

ENCL: 00

SUB CODE: ML

NO REF SOV: 000

OTHER: 000

2/2

Card

ACCESSION NR: AP4038895

S/0182/64/000/005/0001/0003

AUTHORS: Zaleskiy, V. I.; Tsibanova, M. S.; Kozlov, Yu. I.

TITLE: On the profile of hammer blocks for forging on hydraulic presses of low plasticity alloys

SOURCE: Kuznechno-shtampovochnoye proizvodstvo, no. 5, 1964, 1-3

TOPIC TAGS: forging, steel alloy, hammer block, hydraulic press, metal deformation

ABSTRACT: The authors conducted comparison tests on the forging of final parts of steel bars on cut hammer blocks with a 7-mm radius of edge curvature (see Fig. 1 on the Enclosure) and on similar blocks with an angle of inclination ( $\alpha$ ) of 15°. Samples for test use were prepared from low plasticity steel of 40-mm diameter and 200-mm length with a cast structure. The samples were heated and placed on a 200-ton press. The hammer blocks were heated to 300-350°C and sample temperatures of 800, 900, 1000, 1100, and 1200°C were used for testing. The allowed degree of deformation was given by the formula

$$s = \frac{D_0 - h_1}{D_0} \cdot 100\%$$

where  $D_0$  is the sample diameter before deformation and  $h_1$  is the height in

Card

1/3

ACCESSION NR: AP4038895

millimeters of the transverse section after deformation; the same degree of deformation allowed was also calculated by

$$\epsilon = \frac{F_0 - F_1}{F_0} \cdot 100\%$$

where  $F_0$  and  $F_1$  are the area of the transverse section before and after deformation respectively. The resulting degrees of deformation are tabulated, as are the results of varying the inclination angle of the blocks. The optimal inclination angle for one pass was found to be  $20^\circ$ ; the absence of cracks during deformation was noted even for 29.8% deformation. Similar testing using a 3000-ton press in production conditions gave good results. Orig. art. has: 3 figures, 2 tables, and 2 equations.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

Card 2/3



S/148/60/000/009/008/025  
A161/AO30

AUTHORS: Okhrimenko, Ya.M., and Tsibanova, M.S.

TITLE: Inaccuracy of the similarity law

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya,  
no. 9, 1960, 57-61

TEXT: The simple similarity law established in 1874 by V.L.Kirpichev could be one of the fundamental laws in the theory of pressure working if it were accurate. It had been studied in application for metal pressure working by S.I.Gubkin (Ref.1-3) who confirmed the previously observed discrepancy between the specific deformation efforts for the pattern and for the workpiece. The point is that the relation of the total surface as well as of the contact surface to the volume of a body decreases with the increasing size of bodies of a similar geometrical shape. Various authors suggested various correction coefficients (S.I.Gubkin; A.P.Royev (Ref.4) S.G.Golovanov (Ref.5) ). An investigation has been undertaken by the authors with geometrically similar specimens of lead with a similar relation of diameter

Card 1/5

S/148/60/000/009/008/025  
A161/A030

Inaccuracy of the similarity law

to height  $\frac{D_0}{H_0} = 0.5$ . The specimens were upset 20% of height and the dimensions and deformation force fixed, then upset again 20%, and once more 20%. It was stated that the discrepancy from the similarity law was not the same in specimens of different height (Fig.2 and 3). The total specific surface diminishes with the increasing volume of the specimens, and more intensively in low specimens (upper curves in Fig.2 and 3). The same to a higher degree applies to the friction surface coefficient  $\beta_K$  which determines the intensity of contact forces. The lower the specimen the more intensively diminish the coefficients  $\beta_K$  and  $\beta$  (general coefficient of specific surface) and the more drastically change the conditions of friction. The conclusion is made that the correction coefficients (scale coefficients) used in calculations of the pressing effort and weight of dropping parts in forging hammers must be different for a different dimensions relation of pattern and workpiece. This has never been considered. It is now proven that the inaccuracy of the similarity law increases with the increasing relation  $\frac{D}{H}$ . The existing correction data (graphs and tables) must be

Card 2/5

S/148/60/000/009/008/025  
A161/A030

Inaccuracy of the similarity law

revised. There are 3 figures and 6 Soviet-bloc references.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

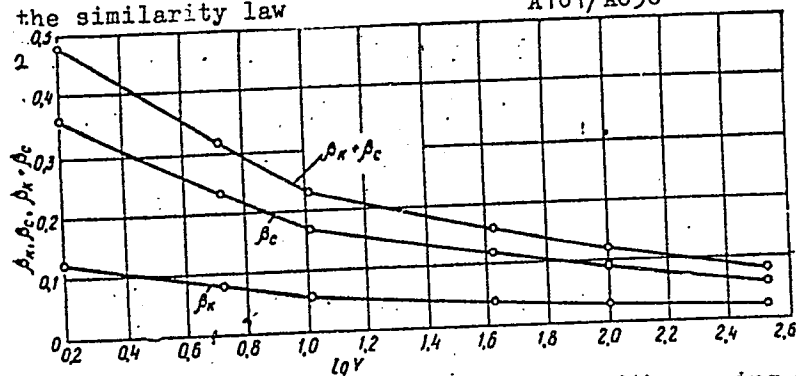
SUBMITTED: 8 December 1959

Card 3/5

S/148/60/000/009/008/025  
A161/A030

Inaccuracy of the similarity law

Fig. 2



Variation of the specific surface of high specimens with varying volume:

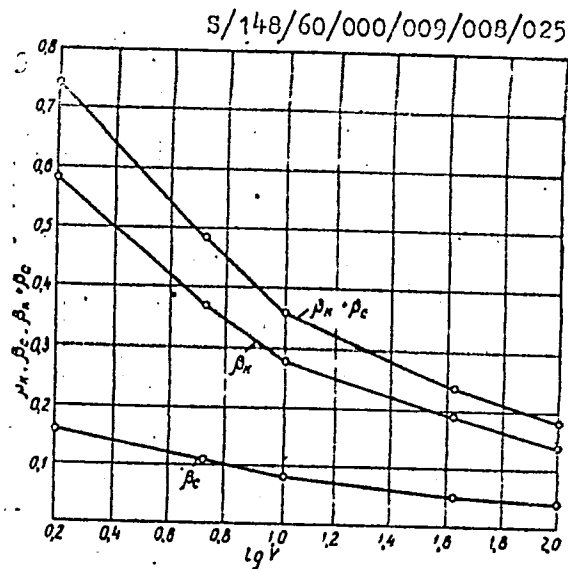
$$\frac{D_0}{H_0} = 0.5; \quad \frac{D}{H_k} \approx 0.7; \quad \xi_0 = 20.0\%$$

(D - specimen diameter after upsetting;  $H_k$  - height of specimen after upsetting;  $\beta_c$  - coefficient of specific free (side) specimen surface)

Card 4/5

Inaccuracy of the similarity law

Fig. 3



Variation of the specific surface of low specimens with varying volume

Card 5/5

OKHRIMENKO, Ya.M.; VTSIBAIKOVA, H.S.

More accurate formulas for the law of similarity. Izv. vys.  
ucheb. zav.; Chern. mot. no.9:57-61 '60. (MIRA 13:11)

1. Moskovskiy institut stali.  
(Metalwork) (Deformations (Mechanics))

OKHRIMENKO, Ya.M.; TSIBANOVA, M.S.; SHIBALOV, N.S.

Work-hardening and recrystallization of the EI617 alloy. Izv.  
vys. ucheb. zav.; chern. met. 5 no.3:95-102 '62. (MIRA 15:5)

1. Moskovskiy institut stali.  
(Heat-resistant alloys--Hardening) (Crystallization)

ZALESSKIY, V.I., professor; TSIBANOVA, M.S., kandidat tekhnicheskikh nauk.

Study of deep drawing processes. Sbor.Inst.stal1 no.31:140-176 '53.  
(MIRA 9:9)

1.Kafedra kovki i shtampovki.

(Deep drawing (Metalwork)) (Strains and stresses)



TSIBANOVA, N.A.

Seasonal and annual changeability of the vegetative cover of the  
northern steppe. Biul.MOIP.Otd.biol. 67 no.3:140 My-Je '62.

(MIRA 15:11)

(Streletskoye Steppe Preserve—Steppe flora)

TSIBANOVA, N.A.

Aspection of the gravelly steppe of the Zhiguli Mountains.  
Bot.zhur. 50 no.2:213-215 F '65.

(MIRA 18:12)

1. Kurskiy pedagogicheskiy institut. Submitted May 9, 1963.

TSIBANOVA, N.A.

Biology of *Adonis vernalis* L. Trudy TSentr.-Chern. gos. zap.  
no.6:209-222 '60. (MIRA 16:8)  
(Central Chernozem Preserve--Adonis)

ANFIMOV, A., kandidat tekhnicheskikh nauk; TSEBANOVA, V.. inzhener.

Assembly line processing of pigskins and cattle hides. Mias. ind.  
SSSR 26 no.5:22-25 '55. (MLRA 9:2)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut myasney promysh-  
lennosti.

(Hides and skins)

81

Line processing of cattle and pork skins. A. Anfinov  
and V. Tsibanova. *Myasnaya Ind. S.S.S.R.* 26, No. 5,  
22-5(1956). The salting of hides and skins in a continuous  
conveyed system is described. The relation of salt pickup  
to time and relation of drying to time at temps. 18-20, 30,  
and 35°, resp., is plotted to serve as basic data for control.  
M. M. Piskur

(1)

KRAVCHENKO, N., inzhener; TSIBANOVA, V., inzhener.

Protective coatings for ferrous metals. Mas.ind.SSSR 25 no.2:32-33 '54.  
(MLRA 7:5)

(Protective coatings)

SHIROKOV, N.V., kandidat khimicheskikh nauk; SINITSYN, K.D., inzhener;  
TSIBANOVA, V.D., inzhener; KRYLOVA, V.V., inzhener; SMELOVA, Z.A.

Continuous mechanized method for the production of sausage casings  
from paper. Trudy VNIIMS no.6:5-9 '54. (MLRA 10:8)  
(Sausage casings)

TSIBAROV, A. S.

"High Tension Compartments for Buildings Liable to Explosions"

report presented at the All-Union Scientific and Technical Conference on the Electrical Equipment in buildings and Outside Installations Liable to Explosions, 14-19 April 1958, Stalino  
(Energet. Byulleten" , 1958, No. 7, pp 29-33)



33538

S/043/62/000/001/008/009

D299/D303

10.12.00 1327

AUTHOR: Tsibarov, V.A.

TITLE: On the connection between the equations of kinetic theory of gases

PERIODICAL: Leningrad. Universitet. Vestnik. Seriya matematiki, mekhaniki i astronomii, no. 1, 1, 1962, 147 - 151

TEXT: It is shown that under certain conditions, a class of solutions to integro-differential equations can be singled out which are also the solutions to the integral equations of the kinetic theory of gases. Two problems are considered: a) Flow of a mixture of gases, occupying all space; b) gas-mixture flow past a body. a) It was shown in Ref. 3 (S.V. Vallander, A.V. Belova. Integral'-nyye kineticheskiye uravneniya dlya smesi gazov s vnutrennimi stepenyami svobody. Vestnik leningr. un-ta, no. 7, 1961) that the distribution function of a gas mixture which occupies all space, satisfies a system of integral equations of type

X

Card 1/4

33538

S/043/62/000/001/008/009  
D299/D303

On the connection between the ...

$$f_i(\bar{r}, \bar{u}, t) = \int_{-\infty}^t \Phi_i \left( \bar{r} - \bar{u}(t-\tau) + \bar{g} \frac{(t-\tau)^2}{2}, \bar{u} - \bar{g}(t-\tau), \tau \right) \times \quad (1)$$

$$\times \Pi_i(\bar{r}, \bar{u}, t, \tau) d\tau, \quad (i=1, 2, \dots),$$

where  $\Pi_i$  is the free-path probability of particles of  $i$ -th kind;  $f_i$  is the distribution function of particles of  $i$ -th kind;  $\sigma_{ik}$  - the collision cross-section;  $\Phi_i$  - a particle-creation function;  $\bar{g}$  - the strength of the field of mass forces. By applying a differential operator to Eq. (1), one obtains the system of integro-differential equations

$$\left( \frac{d}{dt} f_i(\bar{r}, \bar{u}, t) = \Phi_i(\bar{r}, \bar{u}, t) - f_i(\bar{r}, \bar{u}, t) Q_i(\bar{r}, \bar{u}, t), \quad (4)$$

where

$$Q_i(\bar{r}, \bar{u}, t) = \sum_k \iiint |\bar{u} - \bar{u}'| \sigma_{ik}(|\bar{u} - \bar{u}'|) f_k(\bar{r}, \bar{u}', t) d\bar{u}'. \quad (5)$$

It is assumed that  $f_i(\bar{r}, \bar{u}, t)$  are the solutions to system (4), satisfying conditions

Card 2/4

33538

S/043/62/000/001/008/009  
D299/D303

On the connection between the ...

$$\lim_{\tau_s \rightarrow -\infty} f_i(\bar{r} - \bar{u}(t - \tau_s) + \bar{g} \frac{(t - \tau_s)^2}{2}, \bar{u} - \bar{g}(t - \tau_s), \tau_s) \Pi_1(\bar{r}, \bar{u}, t, \tau_s) = 0. \quad (6)$$

Then these solutions will also satisfy system (1) of integral equations. This is proved. Hence, if condition (6) is satisfied and the gas mixture occupies all space, then the solutions to the system of integro-differential equations coincide with the solutions to the system of integral equations. Problem b). In Ref. 3(Op.cit.) it was shown that the distribution function of gas-mixture flow past a body, satisfies a system of integral equations of type

$$f_i(\bar{r}, \bar{u}, t) = \frac{1}{|(\bar{u}_s)_n|} \Psi_i(\bar{r}_s, \bar{u}_s, \tau_s) \Pi_i(\bar{r}, \bar{u}, t, \tau_s) + \int_{\tau_s}^t \Phi_i(\bar{r} - \bar{u}(t - \tau) + \bar{g} \frac{(t - \tau)^2}{2}, \bar{u} - \bar{g}(t - \tau), \tau) \times \Pi_i(\bar{r}, \bar{u}, t, \tau) d\tau \quad (i=1, 2, \dots). \quad (11)$$

Card 3/4

33538

On the connection between the ...

S/043/62/000/001/008/009  
D299/D303

where  $\psi_1$  is a boundary particle-creation function. Expressions are derived which show that in order that the solution to the system of integro-differential equations be the solution to the system of integral Eqs. (11), it is necessary that the solution to the system of integro-differential equations which satisfies condition (6), should also satisfy the boundary conditions

$$f_i(\bar{r}_s, \bar{u}_s, \tau_s) = \frac{1}{|(\bar{u}_s)_n|} \psi_i(\bar{r}_s, \bar{u}_s, \tau_s), \quad (15)$$

where

$$\psi_i(\bar{r}_s, \bar{u}_s, \tau_s) = \sum_k \int \int \int_{(\bar{u}_1)_n < 0} |(\bar{u}_1)_n| f_k(\bar{r}_s, \bar{u}_1, \tau_s) \tilde{T}_k^i(\bar{u}_1, \bar{n}, \bar{u}, \theta) d\bar{u}_1.$$

These boundary conditions were obtained in the references. There are 3 Soviet-bloc references.

Card 4/4

TSIBAROV, V.A.

Relation between equations in the kinetic theory of gases. Aerodin.  
razresh. gaz. no.1:74-79 '63. (MIRA 17:3)

L 04929-67 EWP(m)/EWT(1)

ACC NR: AP6028362

SOURCE CODE: UR/0043/66/000/003/0091/0100

AUTHOR: Tsibarov, V. A.

ORG: none

TITLE: A method for the solution of problems in the aerodynamics of weakly rarefied gases

SOURCE: Leningrad. Universitet. Vestnik. Seriya matematiki, mekhaniki i astronomii,  
no. 3, 1966, 91-100

TOPIC TAGS: aerodynamics, rarefied gasdynamics, boundary layer temperature, aerodynamic boundary layer, viscous flow

ABSTRACT: The author presented in an earlier paper (Vestnik LGU, no. 7, 115-131, 1966) a method for obtaining a more accurate solution to the equations of viscous gas aerodynamics. The present paper proposes practical solutions for further improvements in accuracy by describing the behavior of the gas outside the boundary layer by distribution functions of viscous gases. The "viscous problem" is refined by means of an integral operator. The problem is further refined in the molecular boundary layer by means of an integral equation which is linear relative to the sought for function and which takes into account the particle flow reflected from the surface of the object. A simplified integral operator is also introduced.

Card 1/2

UDC: 533.70

L 04929-67

ACC NR: AP6028362

The proposed procedures are simple and yield parameters characterizing weakly rarefied gases without integration of the macroscopic equations of motion of the gas. Small corrections of the density, temperature, and macroscopic gas velocity within the boundary layer are calculated using Burnett's distribution formula. The author thanks Prof. S. V. Vallander for advice given during the work. Orig. art. has: 36 formulas.

SUB CODE: 12/20/ SUBM DATE: 24Jun65/ ORIG REF: 004/ OTH REF: 001

kh

Card 2/2

L 02436-67 EWP(m)/EWT(1)

ACC NR: AP6027323

(N)

SOURCE CODE: UR/0043/66/000/002/0115/0131

AUTHOR: Tsibarov, V. A.

ORG: none

TITLE: Finding components for the basic moments of the distribution function of a viscous gas by the use of the kinetic integral equation

SOURCE: Leningrad. Universitet. Vestnik. Seriya matematiki, mekhaniki i astronomii, no. 2, 1966, 115-131

TOPIC TAGS: viscous flow, kinetic theory, Navier Stokes equation, *DISTRIBUTION FUNCTION, GAS FLOW*

ABSTRACT: The method of successive approximations is applied to the integral kinetic equation and the correction in the first approximation is sought for the distribution function of a viscous gas. From the distribution function, corrections are calculated for the fundamental moments which characterize a weakly rarefied gas. As the zero approximation the distribution function of a viscous gas is used, the parameters of which are found from the flow equations of a viscous gas under the appropriate boundary conditions. When the first approximation is adequate to compute the distribution function of a weakly rarefied gas, the method presented offers a simple way for finding the basic characteristics of the gas, reducing the summations and differentiations of knowns in the Navier-Stokes equations, thus avoiding the complicated problem of

UDC: 533.70

Card 1/2



L 02436-67

ACC NR: AP6027323

macroscopic boundary conditions in Burnett's equations. The author thanks Professor S. V. Vallander for highly valuable suggestions. Orig. art. has: 75 formulas, 1 figure.

SUB CODE: 2012 /

SUBM DATE: 02Feb65/

ORIG REF: 007/

OTH REF: 004

Card 2/2 *gd*

TSIBAROV, V.A.

Relations between equations in the kinetic theory of gases. Vest.  
IGU 17 no.1:147-151 '62. (MIRA 15:1)  
(Gases, Kinetic theory of) (Integrodifferential equations)

KAPLAN, V.S.; SAMOYLOV, A.A.; TSIBAROV, Yu.A.

Testing models of supports for temporary arches in assembly  
chambers of subway stations without side platforms. Sber.  
trud. LIIZHT no.192:279-290 '62. (MIRA 16:9)

TSIBAROV, Yu.A., inzh.

Applying Euler's hydrodynamic equations for the investigation of  
trachoidal waves. Trudy LIIZHT no.165:100-117 '59. (MIRA 13:6)  
(Waves)

TSIBAKOVSKIY, Ya.; BOMLZYNSKI, M.

Free discharge of granular material through an aperture in the conical bottom of a vessel. Inzh.-fiz. zhur. 6 no.7:26-35 J1 '63.  
(:HRA 16:9)

1. Politekhmicheskii institut, Varshava, Pol'skaya Narodnaya Respublika.  
(Granular materials) (Mechanics)

TSIBASOV, V.P.,  
B. K. KLIMOV, Khim. Tverdogo Topliva 8, 143-54 (1937)

VINOGRADOV, A.V.; KARPOVA, G.D.; TSIBEKMAKHER, T.D.

Hemodynamic indices in healthy persons of various ages. Vardic-  
logiia 5 no.2:66-70 Mr-Apr '65. (MEPA 18:7)

1. Institut terapii (direktor - doystvitel'nyy chlen AMN SSSR  
prof. A.L.Myasnikov) AMN SSSR, Moskva.

TSIBEK MAKHER, T. D.

USSR

Effect of phenamine and luminal upon blood cholesterol and cholesterol esters. T. D. Tsibekmakher (Inst. Moscow Med. Inst.). *Terap. Arkh.* 27, No. 1, 48-55 (1955). — Administration of 20 mg. of phenamine causes a rise of cholesterol and its esters, that of 0.3 g. of luminal a lowering. The free cholesterol/total cholesterol ratio remains nearly unchanged during the height of hyper- or hypocholesteremia. A lowering of blood cholesterol was noted during prolonged administration (0.1 g. 3 times a day) of luminal although the decrease was not as pronounced as after a single administration; cholesterol and its fractions returned to normal levels after discontinuance of luminal administration. The findings tend to confirm the view that the cholesterol level is regulated by the central nervous system. A. S. Mirkhin.



VINOGRADOV, A.V.; VOROB'YOVA, A.I.; LAROVA, G.I.; TSIBITSKHER, T.D.

Changes in hemodynamics in myocardial infarction. Kardiologiya  
2 no.6:37-42 II-9'62. (MIRA 17:8)

1. Iz Instituta terapii ( dir. - deystvitel'nyy chlen AN SSSR  
prof. A.I. Myasnikov ) AN SSSR.

TSIBEKMAKHER, T.D.

Effect of phenamine and luminal on blood cholesterol and cholesterol  
ether content. Terap.arkh. 27 no.1:48-55 '55. (MLRA 8:7)

1. Iz gosspital'noy terapevticheskoy kliniki (zav. deystvitel'nyy  
chlen AMN SSSR prof. A.L.Myasnikov) I Moskovskogo ordena Lenina  
meditsinskogo instituta.

(BLOOD,

cholesterol, eff. of aminoacetophenetidin & phenobarbital)

(CHOLESTEROL, in blood,

eff. of aminoacetophenetidin & phenobarbital)

(ACETOPHENETIDIN, derivatives,

aminoscetophenetidin, eff. on blood cholesterol)

(BARBITURATES, effects,

phenobarbital, on blood cholesterol)

TSIBEL', B.N.

Structure of the human renal glomerulus. Arkh. anat., gist. i embr.  
8:26-33 '63. (MIRA 17:12)

1. Kafedra patologicheskoy anatomii 1-go Leningradskogo meditsinskogo  
instituta (zav.-zasluzhenny deyatel' nauki RSFSR prof. M.A.Zakhar'yevskaya)  
i patologoanatomicheskoye otdeleniye Respublikanskoy bol'nitsy Komi SSSR,  
Syktyvkar.

TSIBEL', B.N. (Syktyvkar)

Morphology of intracapillary glomerulonephritis. Arkh. pat.  
24 no.9:43-49 '62. (MIRA 17:4)

1. Iz kafedry patologicheskoy anatomii (zav. - zasluzhennyy  
deyatel' nauki RSFSR prof. M.A. Zakhar'yevskaya) i Leningradskogo  
meditsinskogo instituta imeni I.P. Pavlova i patologoanatomicheskogo  
otdeneniya Respublikanskoy bol'nitsy Komi ASSR (glavnyy vrach A.N.  
Zlobina).

TSIBEL', B.N.

Changes in the kidney glomerulus in eclampsia and nephropathies during pregnancy. Akush. i gin. 40 no.1:52-54 Ja-F '62.

(MIRA 17:8)

1. Kafedra patologicheskoy anatomii (zav. - prof. M.A. Zakhar'yevskaya) I leningradskogo meditsinskogo instituta imeni Pavlova i patologianatomicheskoye otdeleniye Respublikanskoy bol'nitsy (glavnyy vrach A.N. Zlobina) Komi ASSR.

TSIBEL, B. N.

Chemical Abst.  
Vol. 48 No. 8  
Apr. 25, 1954  
Biological Chemistry

80  
③ CW  
Effect of atropine on regeneration of the skeletal musculature. A. A. KUMBEVA and B. N. Tsibel (P. P. Pavlov Inst. Med. Inst., Leningrad). *Doklady Akad. Nauk S.S.S.R.* 92, 1229-31 (1953). — Mice were given twice daily a gradually increasing dose (0.01 to 0.03 LD) of 0.1% atropine sulfate subcutaneously over a 20-day period, at which point a cut wound was made in the animals, and the expt. continued for 22 days longer. Controls were free of the drug. The test animals show retardation of phagocytosis and elimination of the traumatized tissue and fibrin after 3-4 days in comparison with controls. Even after 6 days much necrotized tissue was still present. The growth and differentiation of new tissue is also retarded similarly. The growth and differentiation of muscle fibrils is relatively more rapid than in the connective tissue; these conditions favor regeneration of the fibers as such. G. M. Kosolapoff.

4444  
B-26-54

TSIBEL', B.N. (Leningrad)

Changes in the renal glomeruli in disseminated lupus erythematosus.  
Ark. pat. 26 no.12:14-18 '64.

(MIRA 18:5)

1. Kafedra patologicheskoy anatomii (zav. - prof. M.A.Zakhar'-  
yevskaya) I Leningradskogo meditsinskogo instituta imeni Pavlova  
i patologoanatomicheskoye otdeleniye Respublikanskoy bol'nitsy  
(glavnyy vrach A.N.Zlobina) Komi ASSR, Syktyvkar.

TSIBEL, B.N. (Syktyvkar)

Method for detecting the basal membranes and connective tissue  
of the glomerulus of the kidney. Arkh.pat. no.3:77-79 '62.  
(MIRA 15:3)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. M.A.  
Zakhar'yevskaya) I Leningradskogo meditsinskogo instituta imeni  
akad. I.P. Pavlova i patologoanatomicheskogo otdeleniya Respub-  
likanskoy bol'nitsy Komi ASSR (glavnyy vrach A.N. Zlobina).  
(KIDNEYS) (CONNECTIVE TISSUES)



TSIBEL', B.N. (Syktyvkar)

Localization of amyloid deposits in the renal glomeruli. Arkh.  
pat. 24 no.11:73-78 '62. (MIRA 18:12)

1. Iz kafedry patologicheskoy anatomii (zav. - zasluzhennyy deyatel'  
nauki RSFSR prof. M.A.Zakhar'yevskaya) I Leningradskogo meditsinskogo  
instituta imeni Pavlova i patologoanatomicheskogo otdeleniya  
Respublikanskoy bol'nitsy Komi ASSR (glavnyy vrach A.N.Zlobina).

SPIVAK, M.S., glavnyy redaktor; BILOZUB, V.G., redaktor; VASILENKO, P.M., redaktor; ZORIN, I.G., redaktor; IL'CHENKO, I.K., redaktor; KOVAL', O.G., redaktor; KRILOV, O.P., redaktor; PUKHAL'S'KIY, A.V., redaktor; SIDORENKO, O.P., redaktor; FEDCHENKO, O.N., redaktor; ANGELINA, P.M., redaktor; BUZANOV, I.F., redaktor; BOYKO, D.V., redaktor; BURKATS'KA, G.E., redaktor; VASILENKO, A.O., redaktor; VLASYUK, P.A., redaktor; GORODNIY, M.G., redaktor; DEMIDENKO, T.T., redaktor; DUBKOVETS'KIY, F.I., redaktor; KIRICHENKO, F.G., redaktor; LITOVCHENKO, G.P., redaktor; OZERNIY, M.O., redaktor; PERSHIN, P.M., redaktor; POPOV, F.A., redaktor; POSMITNIY, M.O., redaktor; PSHENICHNIY, P.D., redaktor; RADCHENKO, B.P., redaktor; POMANENKO, S.S., redaktor; RUBIN, S.S., redaktor; SAVCHENKO, M.Kh., redaktor; SOKOLOVS'KIY, O.N., redaktor; TSIBENKO, K.O., redaktor; SHCHERBINA, O.P., redaktor; KRAVCHENKO, M.F., tekhnichniy redaktor

[Collective farm encyclopedia] Kolhospna vyrobnycha ensyklopediia. Vyd. 2-e, perer. i dop. Kyiv, Derzh.vyd-vo sil's'kohospodars'koi lit-ry URSR. Vol.1. Abrykos - Liutserna. 1956. 756 p. (MIRA 9:9)  
(Agriculture--Encyclopedias and dictionaries)

TSIBENKO, V.O. [TSybenko, V.O.]

Effect of electric stimulations of the hypothalamus on the  
activity of the cardiovascular system. Visnyk. Kyiv. un. no.2.  
Ser. biol. no.2:79-87' 60. (MIRA 16:8)  
(HYPOTHALAMUS) (CARDIOVASCULAR SYSTEM)  
(ELECTRICITY—PHYSIOLOGICAL EFFECT)

TSIBENOVA, TS.TS.

larvae of warble fly under the skin of the eyelids in children.  
Trudy 3-go MMI 32:237-240 '64. (MIRA 18:5)